March 17, 1989

TO: File

FROM: Holland Shepherd, Permit Lead HMS

RE: Field Visit, Umetco Minerals, Pandora Mine, M/037/012, Velvet Mine, M/037/040, Rim-Columbus, M/037/006, and Calliham Mine M/037/023, San Juan County, Utah

On March 15, 1989, Scott Johnson and I met with several representatives of Umetco Minerals for the purpose of field evaluating four recently acquired sites. The sites, listed above, were purchased from Atlas Minerals in the fall of 1988. We were accompanied by the following Umetco representatives: Neils Haubold, Manager of Mines; John Vanderpool, Chief Mine Geologist; Frank Barnett, Manager, LaSalle-Snowball and Pandora Mines; Tony Bates, Mine Engineer; Charles Meyers, Safety Manager; and Jim Hasty, Manager Silver Bell, Deremo and Calliham Mine sites.

Pandora Mine

Umetco is currently mining this site. The ore predominately in demand is vanadium, which runs high enough at this site to make it marketable. The uranium/vanadium ore is hauled to the White Mesa mill, jointly owned by Energy Fuels and Umetco, where the vanadium is separated from the uranium. Since the price of uranium is quite low, at this time, large amounts of yellow cake are being stockpiled at the mill.

The waste dumps at this particular site will present a problem at final reclamation because of the lack of topsoil material. The plan calls for reducing the face of the waste rock material, which will be helpful, but soil amendments will probably be needed to help in revegetation. When the slopes are reduced at final reclamation, the operator will have to salvage as much topsoil as possible at the perimeter of the waste dumps before covered by regraded material.

An inspection of the ephemeral drainage, running through the site, turned up two plugged culverts. I spoke to the operator regarding the culverts and was told they would be cleaned out.

The actual disturbed acreage at this site may be less than the 15 acres indicated in the permit. A $43,544 bond covers the disturbance.

Velvet Mine

This site is currently under suspension. The operator has no plans for it in the immediate future. The area of disturbance, indicated in the plan, is 22 acres. The actual disturbed acreage is probably less. The current $62,535 bond adequately covers the disturbance.

I spoke with the operators concerning the severe erosion of the waste pile outslopes. The western portions of the extensive waste pile is perched above a large, ephemeral drainage (containing flowing water at time of inspection). Pad drainage has concentrated at several points along the western facing slope causing erosion. I spoke to the operator about regrading the top of the pad to direct drainage away from these sensitive areas and into a riprapped channel bisecting the waste pile. I also advised that the top of the outslopes be bermed to prevent further erosion.

Our visit included an inspection of the mine water treatment ponds. Two ponds, about 1/4 mile away from the main site, treat radium contaminated mine water as it is pumped from the mine. When water is pumped from the mine, a polyelectrolyte coagulant is added to it. It is then sent into the first pond for settling. The water is then pumped through a barium chloride mixing circuit and into the second pond for final settling. The water is eventually discharged from the second pond into an ephemeral drainage, parallel of the pond access road. The operator maintains an NPDES discharge permit for the discharge. Barium chloride is not included on the list of parameters for NPDES evaluation.

Rim-Columbus Mine

This site, (Rim Shaft), is currently being reactivated. The primary reason is that vanadium ore is available and economical to mine at this site.

A large low grade ore stockpile has been completely removed, within the last month. The ore was shipped to the White Mesa Mill for processing. The removal of the ore stockpile will contribute considerably to the eventual reclamation of this site.

The permit incorporates two sites, the Rim Shaft and the Columbus portals. We were unable to visit the Columbus portals because of inaccessibility.

The acreage (now at 16), for this site, was reevaluated last summer 1988, by Frank Filas. The current bond for $36,100 should be adequate to cover final reclamation costs.

Calliham Mine

The operator plans to reactivate this site in the immediate future. Plans to pump mine water from the Calliham are already underway. The operator indicates that a 9,000 foot pipeline will be constructed to carry water from the Calliham to the 5 acre pond at the Silver Bell Mine. The Silver Bell Mine lies just north of the Calliham. The operator will be submitting plans for this development to the Division and Bureau of Water Pollution Control.

Because of some confusion regarding the actual number of acres disturbed at this site, we performed a quick survey of the area to better evaluate the disturbance. We determined that the waste dumps had grown since Atlas' last diagram submittal, displaying the area of disturbance. Based on our new estimate, the area of disturbance equals: Main pad and waste dumps, 11 acres; ponds, 5 acres; access roads, 1.7 acres; vent shafts, boreholes and access roads, 2 acres. The total current disturbed acreage equals 19.7 acres. It was determined, on site, that the area outside the upper most contour of the mine water ponds has been reclaimed either by reseeding or natural invasion. This extra acreage was not counted as part of the area of disturbance.

The current bond for $33,700, which covers 10 acres of disturbance will be reevaluated for adequacy at this site. If under the appropriate amount, the operator will be asked to amend the bond.

jb
MN4/93-95
cc: Lowell Braxton
Scott Johnson